

Results: Of the 202 appendicectomies, 23 (11%) were histologically negative for appendicitis and there were 31 (15%) cases of perforated appendix.

When comparing the “negative appendicitis” vs. “inflamed appendix” group, we found no significant difference between the frequency of raised WCC, NC, CRP. The sensitivity and specificity of each blood test for a diagnosis of acute appendicitis were as follows: WCC (62.6% and 52.2%), NC (72.6% and 43.5%), CRP (70.9% and 47.8%), and for ≥ 2 combined tests (70.9% and 43.5%). When comparing “perforated appendix” vs. “non-perforated” group, there was a significant difference in the number of cases with raised CRP ($p < 0.05$). CRP was 90.3% sensitive for perforated appendix.

Conclusions: Inflammatory markers, including WCC, NC and CRP are not accurate enough to diagnose acute appendicitis. However, CRP alone is a sensitive marker for cases of perforated appendix.

1225: OPERATIVE REPORTS AT EMERGENCY INGUINAL HERNIOPLASTY MAY NOT BE COMPREHENSIVE ENOUGH TO AVOID LATER LITIGATION

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Introduction: Chronic groin pain (CGP) after inguinal hernia repair is a multi-factorial problem of variable incidence. Litigation for testicular injury and CGP accounts for up to 40% of claims with settlements averaging over €85,000.

Methods: We scrutinised computerised surgeon-typed reports (ORMIS) of all emergency inguinal hernia repairs in a single DGH during 2013. We specifically sought clear description of spermatic cord handling and inguinal canal nerves.

Results: All repairs ($n = 27$; all male; mean age 65; range: 25–93 years) were performed by surgeons in training using an open approach. The consent form uniformly described CGP as a possible complication. The majority (23/27; 85%) were primary hernias with well-described operative findings in all cases. Cord handling was documented in 19 patients (70%) and two underwent orchidectomy. The repair was augmented with prosthetic mesh in the majority of cases (89%) but the ilio-inguinal nerve status was described in only two patients. No report mentioned ‘seeking but not finding’ nerves.

Conclusions: Surgeons in training seem to disregard documenting the status of nerves at urgent repair. Lawyers can be forgiven for arguing negligence (“post hoc, propter hoc”) if records omit observations on structures prone to ‘inadvertent’ damage. This should be emphasised to all trainees.

1288: THE DIAGNOSTIC VALUE OF INFLAMMATORY MARKERS IN PERFORATED APPENDICITIS

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Introduction: The diagnostic value of white cell count (WCC), C-reactive protein (CRP) and bilirubin as identifiers of perforated appendicitis (PA) remains controversial. The aim of this study is to establish a cut-off point in the levels of these markers to diagnose PA.

Methods: A retrospective analysis of 338 patients who underwent appendicectomy and pathological diagnosis of appendicitis was performed. Receiver operating characteristic (ROC) and area under the curve (AUC) analysis were used to establish the diagnostic accuracy and a cut-off point of the preoperative blood levels of WCC, CRP and bilirubin for identifying PA.

Results: 256 (75.7%) and 82 (24.3%) patients were diagnosed with simple appendicitis (SA) and PA respectively. ROC analysis showed that a high CRP level was the best diagnostic marker for SA and PA with AUC of 0.71 (p -value < 0.0001 , 95% CI 0.64–0.78). High bilirubin level was the second best marker with AUC of 0.64 (p -value < 0.0001 , CI 0.56–0.72). A cut-off point of CRP level > 70 demonstrated a specificity of 80% and sensitivity of 50% for distinguishing PA from SA.

Conclusions: In patients with suspected appendicitis, CRP provides the highest diagnostic accuracy. A CRP level > 70 may be a cut-off point for a likely diagnosis of PA.

1382: IMAGING DURING ACUTE SURGICAL RECEIVING, ARE WE TRULY RUNNING AN EMERGENCY SERVICE?

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Introduction: This audit aimed at identifying the time taken from requesting till performing various emergency imaging modalities in a surgical unit within a District General Hospital setting.

Methods: 105 patients admitted over a period of eight weeks under the care of four different consultants were randomly selected. The sample was representative of all age groups. Both sexes were equally represented as well. Data was collected retrospectively by reviewing case-notes and reviewing the information available on the computer based imaging requesting system used within the trust.

Results: 85 patients (81%) were admitted with abdominal pain. The rest of complaints (19%) included vomiting, abdominal distension and jaundice. 70 Ultrasound scans (US), 32 Computerised Tomography scans (CT), 2 Magnetic resonance scans (MRI) and 1 barium follow through were requested during this period. For US scans, the median time was 11h 49m (range 01:01–52:00), for CT scans the median was 4h 42m (range 01:24–48:17) and for MRI scans the range was 04:55–48:20.

Conclusions: Despite running a 24 hour emergency radiology service within our trust, it was found that there was a significant delay in performing various emergency scans. This delay may have an impact on the care of emergency surgical patients and contributes to inefficient use of surgical beds.

1385: TRIAGE TO RESUSCITATION WITH TRAUMA TEAM ACTIVATION AFFECTS OUTCOME IN ELDERLY PATIENTS SUFFERING SEVERE INJURY

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Introduction: Advancing age is associated with differences in anatomy, physiology and injury patterns and mechanisms. Our aim was to compare the incidence of under-triage amongst the elderly (65+ years) and younger adults (16–64 years) suffering severe injury (ISS > 15) and to determine whether under-triage in the elderly impacted upon outcome.

Methods: Retrospective review of data submitted to the Trauma and Research Network (TARN) between January 2011 and December 2012. Note was made of whether patients were seen by the trauma team in the resuscitation area or by emergency department staff in majors, as well as outcome. Logistic regression was used to determine whether under-triage of the elderly was associated with in-hospital mortality.

Results: 477 younger adults and 249 elderly patients were identified. One third (30.4%) of elderly patients were triaged to resuscitation with trauma team assessment compared with two thirds (67.2%) of younger adults. Being seen by the trauma team was associated with two-fold decrease mortality amongst the elderly ($p < 0.05$).

Conclusions: Our current triage protocol is poorly sensitive in identifying severely injured elderly patients. Being managed by the trauma team on arrival improves the survival of elderly trauma patients. We propose a new triage protocol for use in injured patients aged 65+ years.

1404: IMPROVING RATES OF NEGATIVE LAPAROTOMIES IN SOUTH AFRICA

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Introduction: Penetrating abdominal trauma imposes a difficult decision in balancing the morbidity of negative laparotomy and missing an intra-abdominal injury. In rural South Africa, where trauma rates are high and resources low, we investigate the role of selective conservatism in managing penetrating abdominal injury.

Methods: We collated laparotomy findings for penetrating abdominal trauma between 2010 and 2013 (six months per year). Only cases where the peritoneum was breached were included. Positive laparotomies required surgical intervention, negative laparotomies were when no intra-abdominal injury was identified and non-therapeutic laparotomies were those that had intra-abdominal injury that didn't require surgical intervention and could have been managed conservatively.

Results: 87 laparotomies were performed in 2010, 87 in 2012 and 81 in 2013. The majority required surgical intervention—67%, 73% and 79% respectively. Resources were assessed over this time period and senior staffing levels was the most significant improvement. There was availability of CT and FAST scan throughout.